

ABSTRACT OF THE DISCLOSURE

A circuit arrangement for deriving electrical power from a received electromagnetic field to power a transponder includes a detuning unit connected between two antenna terminals for limiting the power absorbed by the antenna. The detuning unit includes a component having an impedance that passively varies or is actively varied dependent on the field strength of the field prevailing at the antenna. One arrangement of the detuning unit includes two varactor diodes connected anti-parallel between the antenna terminals. Another arrangement of the detuning unit includes a varactor arranged in series between two capacitors between the antenna terminals, a field strength detector, and a controllable voltage source connected to apply to the varactor, a control voltage that varies depending on the detected field strength. Thereby, the input impedance varies depending on the field strength, to achieve impedance matching for a low field strength, and a mis-matched condition for a high field strength.